### **MEMORANDUM**

To:

**Board of Regents** 

From:

**Board Office** 

Subject:

Creation of Department of Neurosurgery,

University of Iowa

Date:

November 6, 2000

#### Recommended Action:

Approve the University of Iowa's proposal to create a Department of Neurosurgery within the College of Medicine, effective immediately.

## **Executive Summary**:

The University of Iowa proposes to create the Department of Neurosurgery from the current Division of Neurosurgery within the College of Medicine. The University believes that achievements of this Division in skill, quality of education, and extramural funding meet the full academic complement expected of a Department in the College of Medicine. Neurosurgery is the only medical or surgical discipline that has its own specialty certification board and training program and does not have departmental status. The University believes that the academic reorganization is necessary to advance the educational, scientific and service mission of this discipline. The granting of departmental status will provide a strengthened basis for recruitment and retention of faculty, enhanced education and training, and growth in research productivity.

The proposal was reviewed by the Interinstitutional Committee on Educational Coordination and the Board Office and both are recommending approval.

Neurosurgery is a specific subspecialty within the surgical disciplines. A 1980 survey by the Society of Neurological Surgeons demonstrated that 42% of neurological surgery training programs were organized as departments. In 1990 the same survey reported an increase to 72%, and it is now estimated that over 85% of all programs have such status. There are no other neurosurgery training programs within the State of Iowa, but some do exist in surrounding areas including Minnesota, Wisconsin, Illinois, Missouri and Nebraska.

According to the University, the Division of Neurosurgery currently functions as a self-supporting, autonomous unit within the Department of Surgery. This Division employs seven faculty, six of whom are tenured. The Residency program at the University of Iowa is fully approved by the Neurosurgical residency Review Committee. The proposal has been advanced by the faculty committee reviewing the Department of Surgery, reviewed by the Chair and the faculty of the Division, the College of Medicine Executive Committee, and endorsed by the Medical Council, and is now being presented by the University for Board approval.

Attached are the University's responses to the Board of Regents New Program Review Questions.

Robert J. Barak

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Frank J. Stŏrk

h/aa/docket/2000/October/suiA2

# Proposal to Create a Department of Neurosurgery College of Medicine University of Iowa

## **Executive Summary:**

The College of Medicine proposes to create a new Department of Neurosurgery, the first new department in the College in several decades. The Department would be established from the current Division of Neurosurgery in the Department of Surgery. This academic reorganization is necessary to advance the educational, scientific and service mission of this discipline at the University of Iowa.

## 6.05 Academic Program Review:

- A. Review process for new or expanded academic programs at Regent Universities.
- 1. a-b How this proposed program will further the educational and curricular needs of students in this discipline and in other units in the College and the University?

#### Need:

Neurosurgery is a specific subspecialty within the surgical disciplines. Since 1976, Neurosurgery has been a division within the Department of Surgery. At that time the division was in the early stages of its academic development in education and research after achieving success as an excellent clinical (patient care) program at the University of Iowa Hospitals and Clinics. The discipline of neurosurgery has continued to evolve as new operative techniques, diagnostic and therapeutic procedures, anesthesia capacities, and interdisciplinary efforts (such as collaborative work with vascular surgery and orthopaedic surgery) have made major advances in the care of patients. Many regions of the brain, cranium (skull) and cervical spine are now amenable to treatment and cure as a result of these advances.

The Division of Neurosurgery at the University of Iowa has achieved national recognition due to the excellent technical skills of the faculty, the quality of the graduate medical education (residency) program, the achievement of extramural funding for clinical and basic science research, and the national leadership roles of its faculty in specialty organizations and accreditation bodies.

The achievements of the Division now meet the full academic complement expected of a Department in the College of Medicine. The granting of departmental status will provide a strengthened basis for recruitment and retention of faculty, enhanced education and training, and growth in research productivity.

# Further Historical Background:

A survey by the Society of Neurological Surgeons of the 95 neurological surgery training programs in the United States in 1980, demonstrated that 53% of the programs were divisions in larger academic units, 42% were departments and 5% were in an uncertain organizational structure. When the survey was repeated ten years later (1990), over 72% of the training programs had departmental status and only 22% were divisions. Since that time, a significant number of major programs (including the University of Wisconsin-Madison, Stanford University-Palo Alto, CA, and Georgetown University-Washington, DC) achieved departmental status. It is now estimated that over 85% of all programs have such status.

Within the College of Medicine at the University of Iowa, Neurosurgery is the only medical or surgical discipline that has its own specialty certification board and training program and does not have departmental status. On several occasions in the past, the Chair of the Division of Neurosurgery has made a formal request of the Department of Surgery and the Dean of the College of Medicine to establish the Division as a Department. The request was made in 1991, but due to prolonged interim deanship no action was undertaken. In 1995, shortly after the appointment of the current Dean, the committee charged with the academic review of the Department of Surgery considered the issue and recognized the merits of departmental status, but the decision to proceed was deferred due to interim leadership in the Department of Surgery. Once again, during the 2000 academic review of the Department of Surgery, the issue was revisited. The faculty committee reviewing the Department has endorsed the recommendation for departmental status.

2. a-e Regarding other programs in this field of study at other educational institutions in lowa:

There are no other neurosurgery training programs within the State of Iowa. Furthermore, only major cities within the State have clinicians practicing within this discipline at the regional medical centers in those cities. There are Departments of Neurosurgery in academic medical centers in a number of states surrounding Iowa, including at the University of Minnesota and the Mayo Clinic in Minnesota, the University of Wisconsin-Madison, the University of Illinois-Chicago, the University of Missouri and the Washington University in Missouri, and the University of Nebraska-Omaha. Each of these academic units has a neurological surgery training program. While the recruitment of neurosurgeons in regional medical centers in Iowa almost always involves a national search, there is preference to identifying graduates of the training program at the University of Iowa due to its fine reputation and community physician familiarity with University faculty.

# f-g Not Applicable

3. Estimates of number of students affected by the program in the next five years:

Two graduating medical students are selected to enter a six-year graduate medical education program at the University of Iowa each year. The first year of post-medical school training is in a general surgical residency (which can be obtained at another institution). The University of Iowa has one of the larger neurosurgical residency training programs, as only 27 of the 93 training programs in the United States accept two or more trainees each year. For these positions, the current Division receives between 100-125 applications each year and interviews between 25-35 individuals. Therefore, those individuals selected to enter the residency do so on a highly competitive basis and generally have distinctive undergraduate medical education records. The residents are selected based on their capacity to pursue exemplary clinical and investigative training efforts. For example, over this past five years over 100 manuscripts involving residents as authors or co-authors have been published in refereed scientific journals or as textbook chapters. In addition, the residents, by invitation, have presented scientific papers at local, national and even international meetings. At present, two residents have two-year NIH career investigative grants and are planning academic careers. Research is encouraged and also structured as protected time throughout the residency. Residents also participate in the neuroanatomy curriculum provided to first-year medical students. It is not anticipated that the training program will grow during succeeding years, but the emphasis will be placed on improving the excellence of trainees so that the highest caliber of medical school graduates nationally can be recruited to lowa.

4. Data and information on employment opportunities available to graduates of this program in lowa and nationally:

Since 1976, all residents in the lowa program have successfully completed Part I of the Board of Neurological Surgery examination. This part of the Board certification is required to successfully complete the residency. In addition, all trainees completing their residencies since 1976 have successfully completed Part II of the examination and are diplomats of the American Board of Neurological Surgery. All residents have obtained employment immediately upon completion of their training in academic centers or private practice.

# 5. Accreditation Standards:

The residency program at the University of Iowa is fully approved by the Neurosurgical Residency Review Committee (which is comprised of elected representatives of the American Medical Association, the American College of Surgeons, and the American Board of Neurological Surgeons). The Division has

maintained its full accreditation status following each of four site visits at five-year intervals since 1977, the last review occurring in November 1996. There have been no serious concerns or restrictions placed on the training program in any of these formal reviews.

- 6. Meeting of National Standards:
  - As noted, the training program is accredited. The next accreditation visit is anticipated for the fall of 2001.
- 7. The Coordinating Council for Post-High School Education has not been consulted as this body is not viewed as relevant to this clinical academic specialty.
- 8. Additional resource needs:

The Division of Neurosurgery currently functions as an autonomous unit within the Department of Surgery. The Division is self-supporting. It maintains a trust fund from its clinical revenues and also has endowments in the University of Iowa Foundation to support the development of its academic programs. There are currently seven faculty within the Division, six of whom are tenured. These faculty have achieved distinction within their discipline. The current Chair of the Division (John C. Vangilder, M.D.) is the past Chairman of the American Board of Neurological Surgery and the current Chairman of the Neurosurgery Residency Review Committee. Each of the faculty has a subspecialty expertise and is engaged in clinical and/or basic research related to that expertise.